

Claims

1. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless phone without ringing the wireless phone, the method comprising:

- receiving a call request at a call processing control entity, the call request being a request for direct access to the wireless multimedia mailbox associated with the wireless phone; and
- directing the call request to the wireless multimedia mailbox without ringing the wireless phone.

2. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless phone without ringing the wireless phone in accordance with claim 1, the method further comprising the step of  
5 determining whether the wireless phone has subscribed to direct multimedia mail service.

3. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless  
10 phone without ringing the wireless phone in accordance with claim 2, the method further comprising the step of establishing a bearer path between the calling phone and the wireless phone.

15 4. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless phone without ringing the wireless phone in accordance with claim 2, the method further comprising the step of sending the call request to the wireless phone if the  
20 wireless phone has not subscribed to direct multimedia mail service.

5. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless  
25 phone without ringing the wireless phone in accordance with claim 4, the method further comprising the step of directing the call request to the wireless multimedia mailbox if the wireless phone does not answer the call request.

30 6. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless phone without ringing the wireless phone in accordance with claim 1, the method further comprising the step of  
35 locating the wireless phone.

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7. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless phone without ringing the wireless phone in accordance with claim 6, wherein the step of locating the wireless phone comprises sending a query message to a subscriber database.

8. A method for leaving a multimedia mail message in a wireless multimedia mailbox associated with a wireless phone without ringing the wireless phone in accordance with claim 7, wherein the subscriber database responds to the query message with the last known location of the wireless phone.

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9. A method for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone, the method comprising:

registering the wireless phone for direct multimedia  
5 mail service, the direct multimedia mail service allowing  
calls to go directly to the multimedia mailbox associated  
with the wireless phone;

receiving a direct multimedia mail request for the wireless phone, the direct multimedia mail request being  
10 a request to go directly to the multimedia mailbox of the wireless phone without first ringing the wireless phone;  
and

directing the call request to the multimedia mailbox  
associated with the wireless unit without ringing the  
15 wireless unit.

10. A method for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 9, the method further comprising the step of determining whether the wireless phone has subscribed to direct multimedia mail service.

11. A method for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 10, the method further comprising the step of establishing a bearer path between the calling phone and the wireless phone.

12. A method for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 10, the method further comprising the step of sending the call request to the wireless phone if the wireless phone has disabled the direct multimedia mail service.

13. A method for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 12, the method further comprising the step of directing the call request to the wireless multimedia mailbox if the wireless phone does not answer the call request.

14. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone, the communication system comprising:

- 5       a call processing control entity for registering the wireless phone for direct multimedia mail service, the direct multimedia mail service allowing calls to go directly to the multimedia mailbox associated with the wireless phone;
- 10       a subscriber database coupled to the call processing control entity for storing the registration for direct multimedia mail service of the wireless phone;  
          a multimedia mail system coupled to the call processing control entity; and
- 15       a base station coupled to the call processing control entity for receiving a direct multimedia mail request for the wireless phone, the direct multimedia mail request being a request to go directly to the multimedia mailbox of the wireless phone without first
- 20       ringing the wireless phone.

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15. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 14, wherein the base station directs the direct multimedia mail request to call processing control entity, wherein the direct multimedia mail request comes from a calling party, and wherein the calling party is directed to the multimedia mailbox of the wireless phone without ringing the wireless phone.

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16. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 14, wherein the call processing control entity is a Mobile Switching Center (MSC).

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17. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 16, wherein the MSC includes a Service Circuit (SVC).

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18. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 14, wherein the subscriber database is a Home Location Register/Visitor Location Register (HLR/VLR).

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19. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 14, the communication system further comprising a Public Switched Telephone Network (PSTN) coupled to the call processing control entity for providing communication with landline users.

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20. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 14, wherein the call processing control entity is a Call  
5 Session Control Function (CSCF).

21. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 20,  
10 wherein the CSCF includes a Multimedia Resource Function (MRF).

22. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without  
15 ringing the wireless phone in accordance with claim 21, wherein the MRF determines the intention of a calling party and sends a message to the CSCF, the message instructing the CSCF to perform specified functionality based upon the intention of the calling party.

20 23. A communication system for providing direction of calls to a multimedia mailbox of a wireless phone without ringing the wireless phone in accordance with claim 14, wherein the subscriber database is a Home Subscriber  
25 Server (HSS).



- 5           a processor for registering a wireless phone for  
direct multimedia mail service, the direct multimedia  
mail service allowing calls to go directly to the  
multimedia mailbox associated with the wireless phone;  
          an input port for receiving a direct multimedia mail  
10 request for the wireless phone, the direct multimedia  
mail request being a request to go directly to the  
multimedia mailbox of the wireless phone without first  
ringing the wireless phone; and  
          an output port for directing the call request to the  
15 multimedia mailbox of the wireless unit without ringing  
the wireless unit.

25. A processing control entity in accordance with claim 24, wherein the processor determines whether the wireless phone has subscribed to direct multimedia mail service.

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26. A call processing control entity in accordance with claim 25, wherein the processor establishes a bearer path between the calling phone and the wireless phone.

10 27. A call processing control entity in accordance with claim 25, wherein the processor sends the call request to the wireless phone if the wireless phone has disabled the direct multimedia mail service.

15 28. A call processing control entity in accordance with claim 27, wherein the processor directs the call request to the multimedia mailbox if the wireless phone does not answer the call request.

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